

Claims amended: WHAT IS CLAIMED IS:

1. Process for the operation of a cordless communication system with a mobile terminal (3) of a public mobile communication system with a base station (1) that is connected to the public fixed network (2) and that is compatible at the wireless interface with the mobile communication system that features at least on authentication function characterized by the capability of the base station (1) to read/write information from/to at least one identification module (7) by means of a reader/writer, wherein parts of the data of the identification module (7) used in the base station (1) are identical to the data stored on the chip card (SIM) of the access-authorized mobile terminal (3),

the capability to process the read data by means of software implemented in the base station (1),

authentication of the mobile terminal (3) with regard to the base station (1) by means of data read and processed by the identification module (7), wherein the base station (1) fulfils the same functions and tasks as the home location register and, respectively, the authentication center of the mobile communication system, and

after successful authentication the operation of the mobile terminal (3) through the public fixed network (2).

2. Process according to Claim 1, characterized in that the network carrier of the mobile communication system can block the authorization of the mobile terminal (3) to log into the base station (1) of the cordless communication system.

3. Process according to Claims 1 or 2, characterized in that besides individual subscriber data, other data for the purpose of authentication can be stored on the identification module (7), in tamper-proof fashion, namely, the allowed frequencies, the maximum permitted output power for the base station (1) and for the mobile terminal (3), the permitted services, and all other initialization parameters that the network carrier desires to influence and that constitute the general framework for the operation of base station (1) of the cordless communication system.

4. Process according to Claims 1-3, characterized in that the wireless interface of the base station (4) of the cordless communication system operates in the frequency spectrum of a public mobile communication system.

5. Process according to Claims 1-4, characterized in that the transmitted data is encrypted at the wireless interface.

6. Process according to Claims 1-5, characterized in that the base station (1) includes a timer that is programmed to a specific time by the network carrier, and that is automatically reset under the condition of legal use by the subscriber, wherein the base station (1), if it is not used after the preset time period has passed, loses its authorization to operate its transmitter on the frequencies of the mobile communication system.

7. Process according to Claim 6, characterized in that if the base station (1) is automatically shut off due to disconnection of the timer, it is possible to emergency-restart its operation.

8. Process according to Claim 7, characterized in that the operation of the base station (1) can only be emergency-restarted within a defined time window.

9. Cordless communication system for the operation of a mobile terminal (3) of a mobile communication system with a base station (1) that is connected to the public fixed network (2) and that is compatible at the wireless surface with the mobile communication system that features at least one authentication function characterized in that

a reader/writer for reading/writing of information from/to at least one identification module (7) is incorporated in a base station (1), wherein the parts of the data of the identification module (7) used in the base station (1) are identical to those on the chip card (SIM) of an access-authorized mobile terminal (3) and

software is implemented in the base station (1) for the processing of the read data and for the authentication of the mobile terminal (3) relative to the base station (1) by means of data that is read and processed by the identification module (7), wherein the base station (1) fulfills the same functions and tasks as the home location register and, respectively, the authentication center of the mobile communication system.

10. Cordless communication system according to Claim 9, characterized in that chip cards (SIM) are used for the identification module (7), which are commonly

Article 34 audit

used in mobile communication systems, such as according to ISO ID-1, ID-000, DCS
1800, PCS 1900.

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